Claims

1. An integrated endoscope and medical treatment accessory comprising:

an endoscope shaft having a treatment accessory integrated at its distal end;

at least one accessory control element extending through the length of the endoscope; and

an accessory control mechanism mounted at the proximal end of the endoscope.

2. An integrated endoscope as defined in Claim 1 wherein the treatment accessory further comprises a tissue apposition device comprising at least one section port and at least one needle longitudinally slidable through the accessor to penetrate tissue aspirated into the suction port.

3. An integrated endoscope as defined in Claim 1 wherein the treatment accessory comprises a tissue apposition device formed as a cylindrical cartridge that mounts over a reduced diameter portion of the endoscope.

4. An integrated endoscope as defined in Claim 3 wherein the cylindrical cartridge further comprises a side suction port and at least one tissue capturing means that is advanced through captured tissue along a circumferential path that rotates about a longitudinal access of the endoscope.

5. An integrated endoscope as defined in Claim 4 wherein the suction port further comprises a petition wall that forces aspirated tissue to form into two separate tissue mounds.

6. An integrated endoscope as defined in Claim 1 wherein the treatment accessory comprises a tissue suturing device having at least one suction port and

vacuum chamber and a semi-circular needle configured to be advanced in a circular path that traverses the vacuum chamber and tissue aspirated therein.

7. An integrated endoscope as defined in Claim 1 wherein the treatment accessory further comprises a tissue apposition device having at least one suction port and vacuum chamber having a bottom surface and an optical viewing port and air and water port are present on the bottom surface.

8. An integrated endoscope as defined in Claim 7 wherein the treatment accessory further comprises an optical viewing port and air and water port located at a distal tip of the endoscope accessory.

9. An integrated endoscope as defined in Claim 1 wherein the treatment accessory further comprises a tissue apposition device having an angulated distal face that is oriented at an acute angle from the longitudinal access of the endoscope;

a suction port opened on the distal face to a vacuum chamber having a back wall surface; an optical viewing port and vacuum port arranged on the back wall surface of the vacuum chamber and

a needle configured to be advanced so that it traverses the vacuum chamber at an orientation that is parallel to the distal face.

10. An integrated endoscope as defined in Claim 1 where in the treatment accessory further comprises a tissue apposition device having a suction port with a partial petition wall to divide tissue aspirated into the port into two portions;

at least one staple oriented to be advanced through captured tissue portions and closed upon an anvil located at a distal end of the accessory, and

a staple driver for advancing a staple longitudinally through the accessory and captured tissue portions.

11. An integrated endoscope as defined in Claim 1 wherein the treatment accessory further comprises;

at least one access port adjacent the distal end of the endoscope and

a tissue grasping device arranged to be advanced through the access port and operated to grasp tissue and pull it through the access port into the accessory.

12. A method of performing an endoscopic medical procedure comprising:

providing an endoscope having an integrated medical treatment accessory at its distal end,

inserting the distal end of the endoscope into a patient and navigating it to a treatment site carrying out a medical procedure involving manipulation of internal tissues, without introducing a secondary medical device through the endoscope or external to the endoscope, and

withdrawing the endoscope from the patient.